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This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

1. (Previously Presented) A tetrakisfluoroalkylborate salt of general formula (1) **(I)** 

 $M^{n+}$  ([BR<sub>4</sub>])<sub>n</sub>

wherein

n = 1, 2 or 3.

M<sup>n+</sup> is a univalent, bivalent, or trivalent cation, each of the ligands R are the same and straight-chained or branched, representing  $(C_xF_{2x+1})$ , with  $1 \le x \le 8$ , and

- 2. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the Mn+ cation is an alkali metal cation.
- 3. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the M<sup>nt</sup> cation is a magnesium or aluminum cation.
- (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, 4. wherein Mn+ is an organic cation.
- 5. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 33, wherein  $1 \le 0 \le 6$ ,  $0 \le p \le 20 + 1$ , and  $0 \le q \le 20 + 1$ , and A represents an aromatic residue optionally having heteroatoms, or a 5- or 6-membered cycloalkyl residue.

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wherein

the residues  $R^1$  to  $R^6$ , each of which is the same or different, and optionally two of the residues  $R^1$  to  $R^6$  together, represent H, a halogen, or a  $C_{1-8}$  alkyl residue optionally substituted by F, Cl,  $N(C_aF_{(2a+1-b)}H_b)_2$ ,  $O(C_aF_{(2a+1-b)}H_b)$ ,  $SO_2(C_aF_{(2a+1-b)}H_b)$ , or  $C_aF_{(2a+1-b)}H_b$  wherein  $1 \le a \le 6$ , and  $0 \le b \le 2a+1$ .

- 8. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the ligands R are the same, representing  $(C_xF_{2x+1})$ , with x = 1 or 2.
- 9. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein each of the ligands R are the same, representing a CF3 residue.
- 10. (Previously Presented) A method of producing a tetrakisfluoroalkylborate salt of claim 9, wherein at least one compound of general formula (X)

$$\mathbf{M}^{\mathsf{n}^{\mathsf{T}}}\left(\left[\mathbf{B}(\mathbf{C}\mathbf{N})_{4}\right]^{\mathsf{T}}\right)_{\mathsf{n}}\tag{X}$$

is fluorinated by reacting with at least one fluorinating agent in at least one solvent, and the thus-obtained fluorinated compound having the general formula (I) is purified and isolated.

11. (Previously Presented) A method according to claim 10, wherein the reaction with the fluorinating agent is performed at a temperature ranging from -80 to +20°C.

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- 12. (Previously Presented) A method according to claim 10, wherein fluorine, chlorine fluoride, chlorine trifluoride, chlorine pentafluoride, bromine trifluoride, bromine pentafluoride, or a mixture of at least two of these fluorinating agents is used as a fluorinating agent.
- 13. (Previously Presented) A method according to claim 10, wherein hydrogen fluoride, iodine pentafluoride, dichloromethane, chloroform, or a mixture of at least two of these substances is used as a solvent.
  - 14. (Previously Presented) A mixture, comprising:
  - a) at least one tetrakisfluoroalkylborate salt of general formula (I) according to claim 1, and
  - b) at least one polymer.
- 15. (Previously Presented) A mixture according to claim 14, wherein the mixture comprises 5 99 wt.-% of component a) and 95 1 wt.-% of component b).
- 16. (Previously Presented) A mixture according to claim 14, wherein a component b) is a homopolymer or copolymer of an unsaturated nitrile, a vinylidene, an acrylate, a methacrylate, a cyclic ether, an alkylene oxide, a siloxane, a phosphazene, an alkoxysilane, or an organically modified ceramic, or a mixture of at least two of the above-mentioned homopolymers and/or copolymers and optionally at least one organically modified ceramic.

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- 17. (Previously Presented) A mixture according to claim 16, wherein the component b) is a homopolymer or copolymer of vinylidene difluoride, acrylonitrile, methyl (meth)acrylate, or tetrahydrofuran.
- 18. (Previously Presented) A mixture according to claim 14, wherein the polymer is at least partially crosslinked.
- 19. (Previously Presented) A mixture according to claim 14, wherein the mixture further comprises at least one solvent.
- 20. (Previously Presented) A mixture according to claim 19, wherein a solvent is an organic carbonate, an organic ester, an organic ether, an organic amide, a sulfurcontaining solvent, an aprotic solvent, or at least a partially fluorinated derivative of the above-mentioned compounds, or a mixture of at least two of these compounds and/or fluorinated derivatives.
- 21. (Previously Presented) A method of producing a mixture according to claim 14, wherein at least one tetrakisfluoroalkylborate salt of general formula (I)

$$M^{nr} ([BR_4]-)_n$$
 (I)

wherein

Mnt is a univalent, bivalent, or trivalent cation,

each of the ligands R are the same and straight-chained or branched, representing

 $(C_xF_{2x+1})$ , with  $1 \le x \le 8$ , and

n = 1, 2 or 3,

and at least one polymer and optionally at least one solvent are mixed.

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22. (Previously Presented) A method according to claim 21, wherein said mixing is effected at an elevated temperature.

## 23. (Canceled)

- 24. (Previously Presented) An electrolyte comprising at least one tetrakisfluoroalkylborate of general formula (I) according to claim 1, or at least one mixture thereof further comprising at least one polymer.
- 25. (Previously Presented) An electrolyte according to claim 24, wherein the concentration of the tetrakisfluoroalkylborate salt(s) in the electrolyte is from 0.01 to 3 mol/l.
- 26. (Previously Presented) A primary battery comprising at least one tetrakisfluoroalkylborate of general formula (I) according to claim 1 or at least one mixture thereof further comprising at least one polymer.
- 27. (Previously Presented) A secondary battery comprising at least one tetrakisfluoroalkylborate of general formula (1) according to claim 1 or at least one mixture thereof further comprising at least one polymer.
- 28. (Previously Presented) A capacitor comprising at least one tetrakisfluoroalkylborate of general formula (I) according to claim 1 or at least one mixture thereof further comprising at least one polymer.

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- 29. (Previously Presented) A supercapacitor comprising at least one tetrakisfluoroalkylborate of general formula (I) according to claim 1 or at least one mixture thereof further comprising at least one polymer.
- 30. (Previously Presented) A galvanic cell comprising at least one tetrakisfluoroalkylborate of general formula (I) according to claim 1 or at least one mixture thereof further comprising at least one polymer.
- 31. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the  $M^{n*}$  cation is a lithium, sodium or potassium cation.
- 32. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the  $M^{n\tau}$  cation is a lithium cation.
- 33. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 1, wherein the  $M^{n\tau}$  cation is a nitrosyl cation, a nitryl cation, or an organic cation of general formula  $[N(R^7)_4]^{\tau}$ ,  $[P(N(R^7)_2)_k R_{4\cdot k}]^{\tau}$ , with  $0 \le k \le 4$ , or  $[C(N(R^7)_2)_3]^{\tau}$ , wherein each of the residues  $R^7$  are the same or different, representing

H.

 $C_0F_{2o+1-p-q}H_pA_q$ , or

A,

wherein

 $1 \le 0 \le 10$ ,

 $0 \le p \le 20 + 1$ 

 $0 \le q \le 2o + 1$ , and

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A represents an aromatic residue optionally having heteroatoms, or a 5- or 6-membered cycloalkyl residue.

- 34. (Currently Amended) A tetrakisfluoroalkylborate salt according to claim 4-33, wherein A is a phenyl or pyridine residue.
- 35. (Previously Presented) A tetrakisfluoroalkylborate salt according to claim 7, wherein the halogen is fluorine.
- 36. (Previously Presented) A method according to claim 10, wherein the reaction with the fluorinating agent is performed at -60 0°C.
- 37. (Previously Presented) A method according to claim 10, wherein chlorine fluoride, chlorine trifluoride, or a mixture of at least two fluorinating agents comprising chlorine fluoride and/or chlorine trifluoride is used as a fluorinating agent.
- **38.** (Previously Presented) A method according to claim 10, wherein hydrogen fluoride is used as a solvent.
- 39. (Previously Presented) A mixture according to claim 14, wherein the mixture comprises 60 99 wt.-% of component a) and from 40 1 wt.-% of component b).
- 40. (Previously Presented) A mixture according to claim 16, wherein the unsaturated nitrile is acrylonitrile, the vinylidene is a vinylidene diffuoride, the acrylate is a methyl acrylate, the methacrylate is a methyl methacrylate, the cyclic ether is a tetrahydrofuran, or the alkylene oxide is an ethylene oxide.

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41. (Previously Presented) A mixture according to claim 16, wherein the component b) is a homopolymer or copolymer of vinylidene diffuoride.

42. (Previously Presented) A mixture according to claim 20, wherein the organic carbonate is ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, diethyl carbonate, ethyl methyl carbonate, or methyl propyl carbonate; the organic ester is methyl formate, ethyl formate, methyl acetate, ethyl acetate, methyl propionate, ethyl propionate, methyl butyrate, or  $\gamma$ -butyrolactone; the organic ether is diethyl ether, dimethoxyethane, or diethoxyethane, the organic amide is dimethylformamide or dimethylacetamide; the sulfur-containing solvent is dimethylsulfoxide, dimethyl sulfite, diethyl sulfite, or propanesultone; or the aprotic solvent is acetonitrile, acrylonitrile, or acetone.

- 43. (Previously Presented) A method according to claim 21, wherein the mixing is effected at  $20 90^{\circ}$ C
- 44. (Previously Presented) A method according to claim 21, wherein the mixing is effected at  $40-60^{\circ}$ C.
- 45. (Previously Presented) An electrolyte, a primary battery, a secondary battery, a capacitor, a supercapacitor, or a galvanic cell comprising at least one tetrakisfluoroalkylborate salt according to claim 1, or a mixture comprising at least one tetrakisfluoroalkylborate salt and at least one polymer, optionally in combination with other conducting salts and/or additives.

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- 46. (Previously Presented) An electrolyte according to claim 24, wherein the concentration of the tetrakisfluoroalkylborate salt(s) in the electrolyte is 0.01 2 mol/l.
- 47. (Previously Presented) An electrolyte according to claim 24, wherein the concentration of the tetrakisfluoroalkylborate salt(s) in the electrolyte is 0.1 1.5 mol/l.
  - 48. (Previously Presented) A tetrakisfluoroalkylborate salt of formula (I)

 $M^{n+}$  ([BR<sub>4</sub>])<sub>n</sub>

**(I)** 

wherein

Mn+ is a magnesium or aluminum cation;

each of the ligands R are the same and straight-chained or branched, representing  $(C_xF_{2x+1})$ , with  $1 \le x \le 8$ ; and n=1, 2 or 3.

49. (Previously Presented) A tetrakisfluoroalkylborate salt of formula (I)

 $M^{n\tau}$  ([BR<sub>4</sub>]<sup>\*</sup>)<sub>n</sub>

**(I)** 

wherein

M<sup>n+</sup> is an organic cation;

each of the ligands R are the same and straight-chained or branched, representing  $(C_{\lambda}F_{2\lambda+1})$ , with  $1 \le x \le 8$ ; and n=1,2 or 3.

50. (Previously Presented) A tetrakisfluoroalkylborate salt of formula (I)

 $M^{n+}$  ([BR<sub>4</sub>])<sub>n</sub>

**(1)** 

wherein

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 $M^{n+}$  is a heteroaromatic cation of general formulas (II) to (IX):

wherein

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the residues  $R^1$  to  $R^6$ , each of which is the same or different, and optionally two of the residues  $R^1$  to  $R^6$  together, represent H, a halogen, or a  $C_{1\cdot 8}$  alkyl residue optionally substituted by F, Cl,  $N(C_aF_{(2a+1\cdot b)}H_b)_2$ ,  $O(C_aF_{(2a+1\cdot b)}H_b)$ ,  $SO_2(C_aF_{(2a+1\cdot b)}H_b)$ , or  $C_aF_{(2a+1\cdot b)}H_b$  wherein  $1 \le a \le 6$ , and  $0 \le b \le 2a+1$ ; each of the ligands R are the same and straight-chained or branched, representing  $(C_xF_{2x+1})$ , with  $1 \le x \le 8$ ; and n = 1, 2 or 3.

51. (Previously Presented) A mixture comprising 5 – 99 wt.% of at least one tetrakisfluoroalkylborate salt of formula (I)

$$M^{n+}([BR_4]^-)_n \tag{I}$$

 $M^{n+}$  is a univalent, bivalent, or trivalent cation, each of the ligands R are the same and straight-chained or branched, representing  $(C_xF_{2x+1})$ , with  $1 \le x \le 8$ , and n = 1, 2 or 3; and

95 - 1 wt.% of at least one polymer.